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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,689	03/19/2004	Harold E. Mattice	29757/P-864A	9156
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BEYER WEAVER LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			EXAMINER DHILLON, MANJOT K	
			ART UNIT 3714	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/804,689

Applicant(s)

MATTICE ET AL.

Examiner

Malina K. Dhillon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 1-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 38-45 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-45 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/25/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-15 are drawn to a method for determining a position on a touch screen based on a touch position calculator, classified in class 345, subclass 173.
 - II. Claims 16-30 are drawn to an apparatus for determining a position on a touch screen using an analog-to-digital converter to calculate an amplitude of the signal, classified in class 178, subclass 18.05.
 - III. Claims 31-37 are drawn to a method for facilitating game play via a gaming apparatus that includes a touch screen multiplying sinusoidal signals to generate a touch position, classified in class 463, subclass 36.
 - IV. Claims 38-45 are drawn to an apparatus for facilitating game play via a gaming apparatus that includes a touch screen using an analog-to-digital converter to calculate an amplitude of the signal, classified in class 463, subclass 16.

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as using an analog-to-digital converter to calculate amplitude of the signal. See MPEP § 806.05(d).

Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because a touch screen can be used in any type of device such as a PDA. The subcombination has separate utility such as being used specifically in a gaming device.

Inventions I and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as using an analog-to-digital converter to calculate amplitude of the signal for a touch screen used in a gaming apparatus. See MPEP § 806.05(d).

Inventions II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as using an analog-to-digital converter to calculate amplitude of the signal for a touch screen used in any device. See MPEP § 806.05(d).

Inventions II and IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed

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does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because a touch screen can be used in any type of device such as a PDA. The subcombination has separate utility such as being used specifically in a gaming device.

Inventions III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as using an analog-to-digital converter to calculate amplitude of the signal. See MPEP § 806.05(d).

A telephone call was made to David P. Olynick on 9/7/07 to request an oral election to the above restriction requirement, and resulted in an election being made without traverse to examine Group IV.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 38-45 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bertram et al. (US 6476798 B1).

Concerning claim 38, Bertram et al. teaches a gaming apparatus/method, comprising: a display unit; a value input device; a touch screen unit including **[column 2, lines 8-11]**: a sinusoid generator coupled to a first electrode of a touch screen, the sinusoid generator adapted to generate a first sinusoidal signal having a frequency **[column 4, lines 24-27, and fig. 4]**; a first sensor coupled to the first electrode to generate a first sensed signal indicative of a signal flowing from the first electrode **[column 4, lines 24-27]**; a first multiplier having a first input coupled to the first sensor **[column 4, lines 43-46]**, and an output; a first low pass filter having an input and an

output **[fig. 4, items 426 and 440]**, the input of the first low pass filter coupled to the output of the first multiplier **[fig. 4]**. A band pass filter can be a low pass filter by passing all the low frequencies and not allowing any high frequencies though, therefore a band pass filter anticipates, or is an obvious variant of, a low pass filter.

Bertram et al. teaches a first amplitude calculator having a first input, a second input, and an output, wherein the first input of the first amplitude calculator is coupled to the output of the first low pass filter **[column 6, line 52- column 8, line 25]**. Bertram et al. teaches a touch position calculator having a first input coupled to the output of the amplitude calculator, wherein the touch position calculator is adapted to generate an estimate of a touch position based on the output of the amplitude calculator **[column 5, lines 40-60; column 8, lines 36-50]**.

Bertram et al. teaches a main controller operatively coupled to the display unit, the value input device, and the touch screen unit, the main controller comprising a main processor and a main memory operatively coupled to the main processor, the main controller being programmed to receive value input data via the value input device **[figs. 6a and 6b]**.

Bertram et al. teaches the main controller being programmed to cause the display unit to generate a first game display relating to one of the following games: poker, blackjack, slots, keno or bingo, the main controller being programmed to receive player input data via the touch screen unit **[column 2, lines 8-11]**, the main controller being programmed to determine a value payout associated with an outcome of the game. Using the touch screen with an electronic slot machine encompasses games

such as: poker, blackjack, slots, keno, bingo or any other game which all would determine payout according to the game played. This is something that at the time of the applicant's invention was well known in the art.

Bertram et al. teaches a second input coupled to receive a second sinusoidal signal having the frequency and a phase; a second multiplier having a first input coupled to the first sensor, a second input coupled to receive a third sinusoidal signal having the frequency and a phase 90 degrees out of phase with the phase of the second sinusoidal signal, and an output; a second low pass filter having an input and an output, the input of the second low pass filter coupled to the output of the second multiplier; and wherein the second input of the first amplitude calculator is coupled to the output of the second low pass filter **[column 4, lines 59-62 and fig. 5a and all citations listed above]**.

Concerning claim 39, Bertram et al. teaches the first amplitude calculator comprises: a first analog-to-digital converter (ADC) having an input **[column 5, lines 48-51]** and an output **[column 5, lines 52-56]**, wherein the input of the first ADC is coupled to the output of the first low pass filter; and a second ADC having an input and an output, wherein the input of the second ADC is coupled to the output of the second low pass filter **[column 5, lines 46-51]**. A band pass filter can be a low pass filter by passing all the low frequencies and not allowing any high frequencies though, therefore a band pass filter anticipates, or is an obvious variant of, a low pass filter.

Concerning claims 40, 41, 43 and 44, Bertram et al. teaches the touch screen unit comprises a touch screen controller operatively coupled to the first analog-to-digital

converter (ADC), the second ADC, and the main controller **[column 6, lines 18-51]**, the touch screen controller **[fig. 4, element 446]** comprising a touch screen processor **[fig. 4, element 450]** and a touch screen memory operatively coupled to the touch screen processor **[fig. 6b, elements 622, 624, 626]**, the touch screen-controller and/or the main controller being programmed to calculate an estimate of an amplitude of the signal flowing from the first electrode based on outputs of the first ADC and the second ADC **[column 6, lines 52+]**. Bertram et al. teaches the ADC to convert from all filters, therefore, one ADC completes the job of having multiple ADCs in a circuit. Multiplying parts in a circuit that essentially performs the same function as a circuit without multiple parts was well known to someone skilled in the art at the time of the invention.

Concerning claim 42, Bertram et al. teaches the touch screen controller is programmed to calculate a touch position estimate based on the estimate of the amplitude of the signal flowing from the first electrode; wherein the touch screen controller is programmed to provide the touch position estimate to the main controller **[column 6, lines 15-51]**.

Concerning claim 45, Bertram et al. teaches an analog-to-digital converter (ADC) having an input and an output **[column 5, lines 52-56]**, wherein the input of the ADC is coupled to the first sensor **[column 5, lines 43-46]**, and wherein the output of the ADC is coupled to the first input of the first multiplier and to the first input of the second multiplier **[column 5, lines 20-60]**.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ely et al. (US 6249234 B1): Position Detector
- Ely et al. (US 6888538 B2): Position Sensor
- Kim et al. (US 6043810): Digitizer Controller
- Rindal (US 5977961): Method and Apparatus for Amplitude Band Enabled Addressing Arrayed Elements
- D'Amico et al. (US 5956020): Touchscreen Controller with Pen and/or Finger Inputs

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malina K. Dhillon whose telephone number is (571) 270-1297. The examiner can normally be reached on Mon. - Thurs., 7 AM - 6 PM, EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Malina K. Dhillon
Examiner
Art Unit 3714

MKD 9/10/07


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SUPERVISORY PRIMARY EXAMINER